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**13.12.95 Bulletin 95/50**(71) Applicant: **Hughes Aircraft Company**  
**7200 Hughes Terrace,**

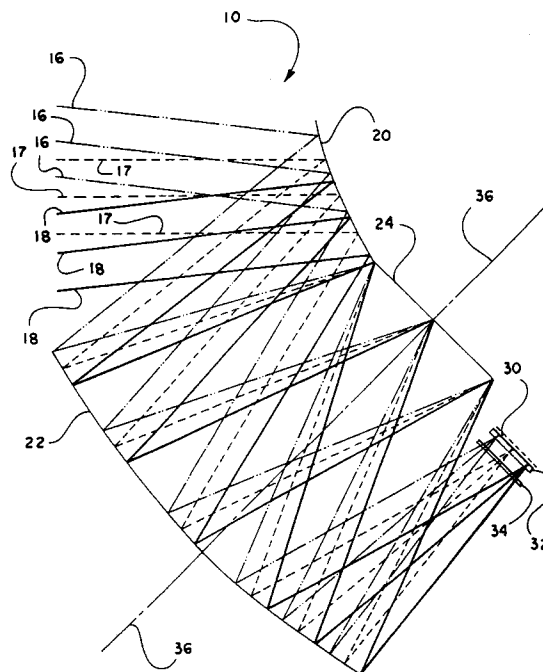
**P.O. Box 80028**  
**Los Angeles,**  
**California 90080-0028 (US)**

(72) Inventor: **Wang, Yaujen**  
**528 E. La Sierra Drive**  
**Arcadia,**  
**California 91006 (US)**

(74) Representative: **KUHNEN, WACKER & PARTNER**  
**Alois-Steinecker-Strasse 22**  
**D-85354 Freising (DE)**

(54) **Compact, folded wide-angle large reflective unobscured optical system**

(57) A wide-angle optical imaging system (10) employs three mirrors (20, 22, 24) to reflect and propagate beams of electromagnetic energy (16, 17, 18) from four reflecting surfaces. A convex mirror (20) is the primary mirror/reflector. A concave mirror (22) is both the secondary and quaternary mirror/reflector for the system. A folding mirror (24) which is essentially flat mirror is the tertiary mirror/reflector for the system. The optical axis (36) of the system (10) is normal to the center of the folding mirror (24). The vertex of the convex mirror (20) and the vertex of the concave mirror (22) lie along the optical axis (36). A distortion corrector (32) and filter (34) are positioned in front of the image plane (30) of the system (10).



**Fig. 2**

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## EUROPEAN SEARCH REPORT

Application Number  
EP 94 11 8237

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	SPIE, INTERNATIONAL LENS DESIGN CONFERENCE, vol. 1354, 1990 pages 430-433, R.C. OWEN 'EASILY FABRICATED WIDE ANGLE TELESCOPE' * abstract; figure 2 * * page 431, line 1 - line 9 * ---	1	G02B17/06
A	US-A-4 205 902 (SHAFFER DAVID R) 3 June 1980 * abstract; claim 5; figure 4 * ---	1	
A	JOURNAL OF VACUUM SCIENCE AND TECHNOLOGY: PART B, vol. 8, no. 6, 1 November 1990 pages 1519-1523, XP 000169155 JEWELL T E ET AL 'REFLECTIVE SYSTEMS DESIGN STUDY FOR SOFT X-RAY PROJECTION LITHOGRAPHY' * abstract; figure 3B * * page 1522, right column, line 4 - line 24 * ---	1	
A	WO-A-92 18893 (TELEDYNE IND) 29 October 1992 * abstract; figure 4 * * page 10 * ---	1	
A	OPTICAL ENGINEERING, vol. 27, no. 12, December 1988 pages 1046-1050, XP 000035029 JOHNSON R B 'WIDE FIELD OF VIEW THREE-MIRROR TELESCOPES HAVING A COMMON OPTICAL AXIS' * abstract; figure 1 * * page 1047, left column, line 40 - line 42 * -----	1	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18 October 1995	Examiner Van Doremalen, J
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons ..... & : member of the same patent family, corresponding document			